(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 16 June 2005 (16.06.2005)

PCT

(10) International Publication Number WO 2005/053942 A1

(51) International Patent Classification⁷: B29C 35/04

B29D 30/12,

(21) International Application Number:

PCT/EP2003/013395

(22) International Filing Date:

28 November 2003 (28.11.2003)

(25) Filing Language:

English

(26) Publication Language:

English

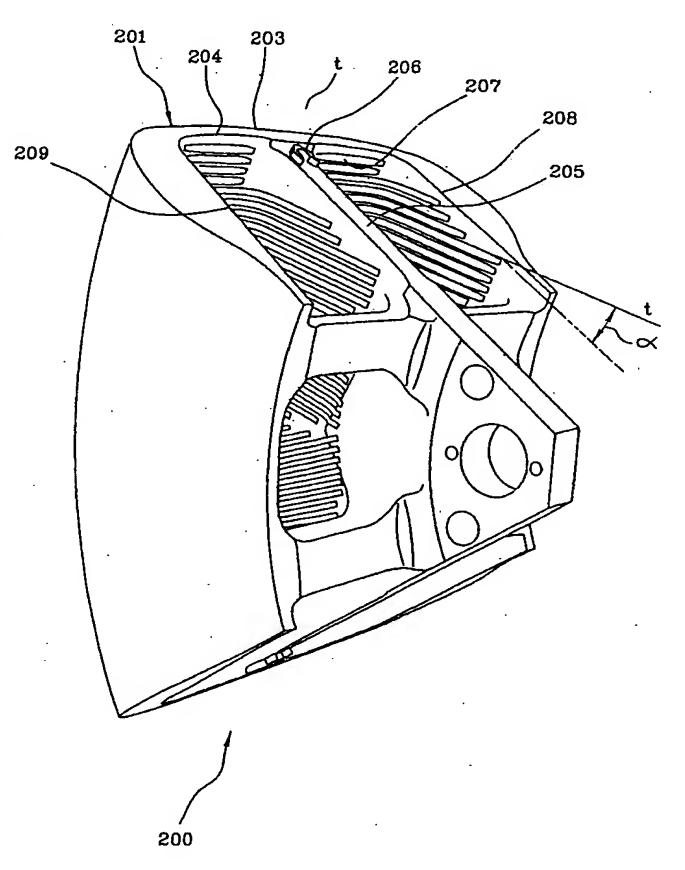
- (71) Applicant (for all designated States except US): PIRELLI PNEUMATICI S.P.A. [IT/IT]; Viale Sarca, 222, I-20126 Milano (IT).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): MARCHINI, Maurizio [IT/IT]; Pirelli Pneumatici S.P.A, Viale Sarca, 222,

I-20126 Milano (IT). MISANI, Pierangelo [IT/IT]; Pirelli Pneumatici S.P.A., Viale Sarca, 222, I-20126 Milano (IT). FERRARI, Gianlorenzo [IT/IT]; Pirelli Pneumatici S.P.A., Viale Sarca, 222, I-20126 Milano (IT).

- (74) Agent: TANSINI, Elio, Fabrizio; Bugnion S.P.A., Viale Lancetti, 17, I-20158 Milano (IT).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,

[Continued on next page]

(54) Title: PROCESS FOR MANUFACTURING A TYRE AND TOROIDAL SUPPORT FOR CARRYING OUT SAID PROCESS



(57) Abstract: The present invention relates to a process for manufacturing a tyre comprising the steps of producing and assembling the tyre structural elements on a toroidal support (300)to form a green tyre, and the step of precuring at least an inner surface of the green tyre by heating the toroidal support. The radially inner surface of the toroidal support is provided with a plurality of protruding elements (207)so as to reduce the time required for the outer surface of the toroidal support to reach a temperature which is suitable for ensuring a uniform and homogeneous precuring of the inner surface of the green tyre, preferably of the inner surface and the bead regions of the green tyre.

WO 2005/053942 A

WO 2005/053942 A1

ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

— with international search report